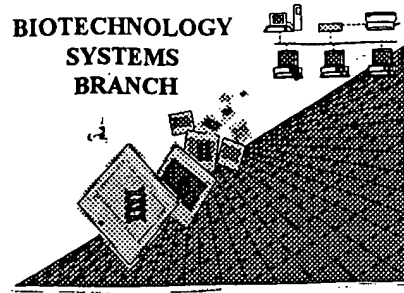


S. Foley

BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/509,712A
Source: 1600 RUSH
Date Processed by STIC: 11/7/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

1600

RAW SEQUENCE LISTING

DATE: 11/07/2001

PATENT APPLICATION: US/09/509,712A

TIME: 13:41:54

Input Set : N:\Crif3\09192001\I509712A.raw

Output Set: N:\CRF3\11072001\I509712A.raw

*see
PP. 1-5**Does Not Comply
Corrected Diskette Needed**(global error)**insert this**mandatory**numeric identifier**Wherever <2217, <2227,**60 or <223>**120**180 is**shown**240**300**360**420**480**540**600**660**720**780**840**900**925*

1 <110> APPLICANT: Rubin, Donald H.
 2 Organ, Edward L.
 3 DuBois, Raymond N.
 4 <120> TITLE OF INVENTION: Mammalian Genes Involved in Viral
 5 Infection and Tumor Suppression
 6 <130> FILE REFERENCE: 01123.0004
 7 <140> CURRENT APPLICATION NUMBER: US/09/509,712A
 8 <141> CURRENT FILING DATE: 2001-08-29
 9 <150> PRIOR APPLICATION NUMBER: PCT/US98/21276
 10 <151> PRIOR FILING DATE: 1998-10-08
 11 <150> PRIOR APPLICATION NUMBER: 60/062,021
 12 <151> PRIOR FILING DATE: 1997-10-10
 13 <160> NUMBER OF SEQ ID NOS: 127
 14 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 925
 18 <212> TYPE: DNA
 19 <213> ORGANISM: Rattus norvegicus
 20 <221> NAME/KEY: misc_feature
 21 <222> LOCATION: 1- 925
 22 <223> OTHER INFORMATION: n = g, a, c or t(u)
 23 <400> SEQUENCE: 1
 W--> 24 gggggaaaaac cnggnaattg ttttttgacg anccaaaaag gggncnagna gcnnttntcc 60
 W--> 25 tanatggggn cgggacntn tccnaggana gattnatgga gtatnccttt tttgcnana 120
 W--> 26 gggttgattgc tcttgaaagg ntttgagggtg naattcctcc gtnagtttga ccgtagtcgg 180
 W--> 27 atntgaagag ggattgttna gcagncataa tttcattccc tgnacacca gtaacnnttt 240
 W--> 28 accgtcattt gggtgggaat tgatntcggg aggtanacan ggccacagtt atttattgtt 300
 W--> 29 ncggaggatt gcaccaattn ggccggctgc ctctganatc tgtttctcat ccatgccggg 360
 W--> 30 tcaccagac gaaagccgaa agcctcggga gtcctaactn tagtcctga aagtcattcc 420
 31 cagctgcgta attgggctgt gcagagtcct agctcggtaa atatttgccc cgtgactgag 480
 32 ctggagagaa tgctcctttc ttggtcctgg gcagctcttg gcagctcaca tgcactgttt 540
 33 acctatcctc ccacattccc ccctgaggaa tcatcgtgcc tcggttcctt taagtcctct 600
 34 caacagaaaa caaggcagag tggaaacgaag gaaagtgcgt ggccgtaga aagcctgtct 660
 35 cgaatctgtc ccacgtgcct caggtagcgt tccaaacagc aaagattcta gtgaagaaaa 720
 36 ataccgtccg gtcaattagt caggtggaca gagcaggacc cgggtgtctt gaagcctcgt 780
 37 ccattcctct ggggaagggt ggggggggcy tgtaatgcag ctctcaagaa gaaggatttt 840
 38 ttgttttctt ggagaaactg ccatcccagg agctgagagt ggatcagtag gaaggcctgt 900
 W--> 39 gacaggaagc agggagggttc agcng 925
 41 <210> SEQ ID NO: 2
 42 <211> LENGTH: 554
 43 <212> TYPE: DNA
 44 <213> ORGANISM: Rattus norvegicus
 45 <221> NAME/KEY: misc_feature
 46 <222> LOCATION: 1- 554
 47 <223> OTHER INFORMATION: n = g, a, c or t(u)
 48 <400> SEQUENCE: 2
 W--> 49 caagatngan ggggcggcgg ttcgnccaga gagcgggtag ggaagggaaac gcgccggatg 60

RAW SEQUENCE LISTING

DATE: 11/07/2001

PATENT APPLICATION: US/09/509,712A

TIME: 13:41:54

Input Set : N:\Crf3\09192001\I509712A.raw

Output Set: N:\CRF3\11072001\I509712A.raw

W--> 50 agccnngggtg cgganagcca gaccccaggc gtgggaaggg gagagagata gagcggcccg 120
W--> 51 ttgggaagag gaggaccgtg gttataaat aacagaaagc ccagagggac gtanccatcc 180
W--> 52 gggatggaga gaggtaggga atccagntgt aagtcccaaa ctgccaccac cttcatnaga 240
W--> 53 actgcttcgt gtaaggtcac gcaccgggccc agctgtccng agtggcggtc ctggcggtgt 300
W--> 54 aagttagcta aagtnactgc aactccgnct gtgcagactg ntcgtaaatt ctctctgtcc 360
W--> 55 gccaaattct ccctcctatt aaacttttca cttcctttca cttagtttcc tnaactcttt 420
W--> 56 caaacggaag ctgtaactga gcctgccacc cnganacntt gtggttgcca tttttatgct 480
W--> 57 aaagtaatcg tgttttttat gcctgtcaac tcccttttca tntaaagcag ggcntaccct 540
58 attataactc tgcc 554

60 <210> SEQ ID NO: 3

61 <211> LENGTH: 891

62 <212> TYPE: DNA

63 <213> ORGANISM: Rattus norvegicus

64 <221> NAME/KEY: misc_feature

65 <222> LOCATION: 1- 825 878 (see below)

66 <223> OTHER INFORMATION: n = g, a, c or t(u)

67 <400> SEQUENCE: 3

W--> 68 ttngaaanaa tttccgtnaa ggtcngnaat nggccccgga aaaaatgngt tcctccccac 60
W--> 69 cttcattggn gcggatccgt ccngggaggc caatgggtta acaaataatc tttnggagnt 120
W--> 70 ntggtngggg ggggagggac ncccacagan tcatgnngtg gttngggngg ngggcatcgt 180
W--> 71 tnnatatta tcacattntg ngaanctatg tnggggcttc ctttcngaca ggtgggtggtt 240
W--> 72 nnacangngg atgtgtgctt cttttttcag cagtgggtga cccggattct aagaccctta 300
W--> 73 cngtaacaat gccctntttt cctaagccta accagtcctt tangaggant gctcttgggn 360
W--> 74 acccatgctg nntcacctag ccttggntca catnttnnac acaggaaaag gcagcatgtc 420
W--> 75 ttntnggagc tcagcttatt cccttccent cccatccagn atctccctgg gntggatgag 480
W--> 76 gtggatgacg catcttcaaa gcacccacg tntcatggga tgtgcacagg agcttcgttg 540
W--> 77 gaaatgtgtt gcgcgaccag gcttgtgtag gaaacaacag actactcgaa attaaagtcn 600
W--> 78 taccttgacg ggttctcaga ggcttttacg cattaataaa catttgaatc ntaagaaggg 660
W--> 79 agcacagcat gtaatatntt tcaaattatc aggcnttgca accttcatta gtttctctta 720
W--> 80 cgcagctggg ngtggtggtg tgtaccttta atctcagcac tgaggaggca cngatatctc 780
W--> 81 catctctgtg acttccagac cggcntcgcc agagcaagtt ccaggccacc cagatgagat 840
W--> 82 gctcacagag gggacctttt tntgatgacc aacgnagat gcaagtaagg a 891

84 <210> SEQ ID NO: 4

85 <211> LENGTH: 974

86 <212> TYPE: DNA

87 <213> ORGANISM: Rattus norvegicus

88 <221> NAME/KEY: misc_feature

89 <222> LOCATION: 1- 974

90 <223> OTHER INFORMATION: n = g, a, c or t(u)

91 <400> SEQUENCE: 4

W--> 92 aaaaanaaat attccgnntc tnttagcnaa gaagtntnnc gagcnntccc ccgtnttttt 60
W--> 93 aaaaaccnc gcattccggn nntcgggntt taanngttt ttaanggcc cnaagncccn 120
W--> 94 nttattgccg nentttcccc cccgctnttg cccccctta cttngagant ngtgntcna 180
W--> 95 agatttnaag gttnttgccc ccccgctttt tnttccccn nttttcccn nagnnttaaa 240
W--> 96 accggtntgg gttncnntt nnttgnancc ncnattggg gtttccgntt accnggggtt 300
W--> 97 ttccccatgn ccgttccctc caatnttgna cttccnggt cngggtcna atnccnngna 360
W--> 98 acngntcnan ccttattgac aattaatttt tcttgnngna nctgncccc cngnntttg 420
W--> 99 gggttcttgg gngcagggcc ttttttctnt tggnggcaan cncataaatn ttaccagntt 480
W--> 100 gattgctaag gaagtancca tgggtgngaa ccccccttn tnttctccca gatggaaccc 540

RAW SEQUENCE LISTING

DATE: 11/07/2001

PATENT APPLICATION: US/09/509,712A

TIME: 13:41:54

Input Set : N:\Crf3\09192001\I509712A.raw

Output Set: N:\CRF3\11072001\I509712A.raw

W--> 101 aggatTTTtgg aactgcagag gcttcagggt cttgggaagc ggaggcagnn aaagattgga 600
W--> 102 gtgcactgtc cttttgcaat atggggTTtTg cctgcctgct ggctcTntctc ctgctntntc 660
W--> 103 agatggTgac tgaggctact tcnGcaggac tnggaataat catgtccagg tggctgccct 720
W--> 104 tccgagcaga aaggGacaga cgtggggcga tgaagttgct atcgtttntt tttttttctg 780
105 cacagactgc aaagtgtgca gagggaggga ggctgtgcaa aaaaaaaaaa aaaaaaaaaa 840
106 aaaaaaaaaa ccgaggacgc agaagttaga ctgctgaccc atttggTgca tgtgtgccca 900
W--> 107 tggaggGagg ggacctntt taaagggttc acgcggcacg cantgggnaa nngnnccnt 960
W--> 108 acgnnnctcc caga 974

110 <210> SEQ ID NO: 5

111 <211> LENGTH: 850

112 <212> TYPE: DNA

113 <213> ORGANISM: Rattus norvegicus

114 <221> NAME/KEY: misc_feature

115 <222> LOCATION: 1- 850

116 <223> OTHER INFORMATION: n = g, a, c or t(u)

117 <400> SEQUENCE: 5

W--> 118 anttttccct caagnaaant ntggTTtTgg caacttgaag acgcttnnac cnaaaaccct 60
W--> 119 tngggagntt ggngaccttn ttaccgnaan gagtgggaaa cgttttccctc cgggttnang 120
W--> 120 gttaggggga cccgnggaa aattttaaaa ccngnggggc tttttcgaat taaggggaaa 180
W--> 121 ngcggttTng gtnntgaag ggcggnggt tggagtcnna gtccagagtt gatttccacc 240
W--> 122 cacaaatntg ggaggTgncg gggaatgntg ncnttttctt gngatgaggg ntgccgtnc 300
W--> 123 ggantaacag ngnttgcntt gtntngcnaa acgaagagtn tcctgnttgg aataggngtt 360
W--> 124 cngttcGang ganccagatt tangngntgg agnaaggatt nggcagataa angcntgaga 420
W--> 125 natgnancnt ggancaggTc nggncnnagn ntacagatga tgnncccana canganataa 480
W--> 126 ntncagatca cagtctgacc cngggtgTgg ccatgaanag ggcattcccca gacnnacaca 540
W--> 127 ngccttnana antgntcaga gaaccancag tggntanggg ntgcccnnnn naccagggaa 600
W--> 128 gacccggggc gtgncggata ttgacacanc agatnnccatt tggggncggT tcgagggttn 660
W--> 129 atgntcnccg agtacnagan angatcntcc aaccgggaat ncggTgctcc ngtcgtccga 720
W--> 130 tгнаatgagT cgnccggnaa cctcatatcc aagaaacnat acagcagTgg nntccgagTc 780
W--> 131 tcgtatatnt nttgcggngg gaggtatnt tcagaggnc aagattaccgt tagcgggana 840
W--> 132 aagtngaana 850

134 <210> SEQ ID NO: 6

135 <211> LENGTH: 531

136 <212> TYPE: DNA

137 <213> ORGANISM: Rattus norvegicus

138 <221> NAME/KEY: misc_feature

139 <222> LOCATION: 1- 531

140 <223> OTHER INFORMATION: n = g, a, c or t(u)

141 <400> SEQUENCE: 6

W--> 142 ttgnggcngg gtctcctctg ngTgngngtn tccccnanag ggggggtctc acagtgtng 60
W--> 143 ngTctntTgt ctgtgtngtg cccctgtccn catctctcac nccagggaga gagatgtgag 120
W--> 144 ananacatca gagatctctn gnacagTgtt tcacaagagT ctatcncana gagcacatct 180
W--> 145 gcccgggngg anacacaact ctaaagtgt ctcanntgat ctctctnttg tgtctctnac 240
W--> 146 atatngggac atgtctcag agtatngnt ctcttngcn cttntgcaca cacacacaca 300
W--> 147 cacacacaca cacacacaca cacncttctc tctggcacag ggntatggca nagcacatnt 360
W--> 148 tngagntca nagctntata tgagtgtgtg gcgaaaggng tnatnanann gacnncccca 420
W--> 149 gcnnatatag gggggngnnc tctngggctc tcttnggnaa tntgngggng agtctgcnc 480
W--> 150 cacaggcgct cnaaccanc nnnttggggc cccccaggng tttttcnccc c 531

152 <210> SEQ ID NO: 7

RAW SEQUENCE LISTING

DATE: 11/07/2001

PATENT APPLICATION: US/09/509,712A

TIME: 13:41:54

Input Set : N:\Crf3\09192001\I509712A.raw

Output Set: N:\CRF3\11072001\I509712A.raw

```

153 <211> LENGTH: 572
154 <212> TYPE: DNA
155 <213> ORGANISM: Rattus norvegicus
156 <221> NAME/KEY: misc_feature
157 <222> LOCATION: 1- 572
158 <223> OTHER INFORMATION: n = g, a, c or t(u)
159 <400> SEQUENCE: 7
W--> 160      tttttntgtg gccctttaaa ctctgngtgn ccgtntnccc nagagggggg gtctcacaag      60
W--> 161      gagacancgg nnacacagag gttttgngnn tattgngagt ctctgcgcac nccananttt      120
W--> 162      aaccncgggg nctcntgttt tattttaaaa aaaaagagtc ncatgtntat ttctctnatg      180
W--> 163      tgaaaatcnc attcanagtt ntgggggtttc ccntgaggag anataagagtt tcacactctt      240
W--> 164      ctctccgagg ggtcntcnca tgtntctccc caatgtgngn ggnacacaca tngggccccc      300
W--> 165      aggggggtgng ctctctctgc ncagggcnc ccccaanang tagaganaca ntgtggtgtt      360
W--> 166      tcacaacaca attcncgaga nattntgttc cncantggnn gtctnagntc ncatgttgtg      420
W--> 167      gngacangtt agnncncccc atnttcnccc ccctttcaca ctgccccnag agagagaaan      480
W--> 168      tctnggcccc ctctanannt ntttttaaat cnccccnnac cacagggtntt cccagggtat      540
W--> 169      gngacntcnc cnncccnncn aaagatntgc nc      572
171 <210> SEQ ID NO: 8
172 <211> LENGTH: 906
173 <212> TYPE: DNA
174 <213> ORGANISM: Rattus norvegicus
175 <221> NAME/KEY: misc_feature
176 <222> LOCATION: 1- 906
177 <223> OTHER INFORMATION: n = g, a, c or t(u)
178 <400> SEQUENCE: 8
W--> 179      tgggagtctc tctcatatgg cgenttcncc aaaggggngt ctctntccng agncgcanac      60
W--> 180      gcgagaanac tctgtnnant ngtctcccc cncnccnaca gngtganant caaaacctct      120
W--> 181      agagcccccc agaaancccc tntctcaaan aaagagaaag agaagancga gnagnagaga      180
W--> 182      gananaagaga gagagagtgt gganctntnt cctcngancc ccannnanan ngtgngggcnc      240
W--> 183      actcncnngt gnnngnacc cnggggatt tncgcgtgtc cccttgngct ctgtntanga      300
W--> 184      gananaatag tntagtctct ctntcgcccc ctccgntgtc acgtgtgcgg ggcccnngag      360
W--> 185      acacagacac ntctctcang gggaacacat annagactcnc acntgtgttt atattcnccc      420
W--> 186      ctcccnctca cacanaacac cacacagnag atattnngct actctctctc tgtcacaggg      480
W--> 187      gtacanattt antctnggcc anacccctct cngaagngng ggcanngtaa accccgcccc      540
W--> 188      ctctcngaga angngagggc gntttacntt cccngtgggc tgtncgngcc cccgagactc      600
W--> 189      cccttngnac cccctntna accctctntt tgaacncaac ncacntccc cnttttctcg      660
W--> 190      gggngngncc ngcnccnct ctcncaaaaa aaattnnaan ttngtccctt nccccntnt      720
W--> 191      ttcnngnana aaccgtgtcc ggggggggan nactcttttt tgnccctaaa atcaantttt      780
W--> 192      ttcccctttt ccnggggacc cccgnnttcc tttttaaaaa aaaanaaccc tttctccctt      840
W--> 193      ttaaaagnac cnttttttc naaaaccgtt ccgnatttaa ttccctaaatt cccttccccc      900
W--> 194      nccccg      906
196 <210> SEQ ID NO: 9
197 <211> LENGTH: 914
198 <212> TYPE: DNA
199 <213> ORGANISM: Rattus norvegicus
200 <221> NAME/KEY: misc_feature
201 <222> LOCATION: 1- 914
202 <223> OTHER INFORMATION: n = g, a, c or t(u)
203 <400> SEQUENCE: 9

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RAW SEQUENCE LISTING

DATE: 11/07/2001

PATENT APPLICATION: US/09/509,712A

TIME: 13:41:54

Input Set : N:\Crf3\09192001\I509712A.raw

Output Set: N:\CRF3\11072001\I509712A.raw

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W--> 204      gggatgngcc ctcagatcaa tacacccctc ngggggngtc tctctctatc tcccnacagna      60
W--> 205      gactcccatc tctntntntn cccccaganc tggngaacgg nggtgtggnga nccntntctg      120
W--> 206      ttctcnantc tctaaaagng cnaaaagcgc ananacacgn gcctctctat anctctcacg      180
W--> 207      tgtcccnngn nctctcngac ccctnntctg tntgagagac accctntctc aaaatatagt      240
W--> 208      gtacacnggc tttgnggctc tccccctttc tctccactnt tgagngngaa acgcggngtt      300
W--> 209      ntctctgaga tgtaganagn gtccctnctc cnatatatgt gttncctact ccnnagggng      360
W--> 210      tctcataaaa atcnctntntc tcaacaccac cncctcnacc ccccnacga gaacacntcn      420
W--> 211      ccaccncnan gacacaaana naaggngtnn anaacccan aaaaactnng ntntcngntt      480
W--> 212      tacacacaca cacacncacn ctncncaca cccccacna aatgggagaa aaaacagaga      540
W--> 213      gnggtgggtg ttngnntcaa caccntntta cctctctgnt gnnanttgag aaaatatttc      600
W--> 214      tntncttacc cctctccctc ctctgtgtgt ngannatate ngntctagat gtcctnacct      660
W--> 215      tccccaaacc tttctcnggn agagacntct ctntnttttt ccccncttc catttgaaan      720
W--> 216      anangagaag gnccaaaaag gngggngtct tctcggaat ncncctttt ggccccccaa      780
W--> 217      cctgggtttt tttccccctt ctttttaatn antttttcna nacaaactt tnnnggtttn      840
W--> 218      ggaaaangcc tttnnctgnn nnttttttcc cttccccctt tnnangggnt tccccccccc      900
W--> 219      ccngaatttt tttt

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221 <210> SEQ ID NO: 10

222 <211> LENGTH: 400

223 <212> TYPE: DNA

224 <213> ORGANISM: Rattus norvegicus → 2207

225 <221> NAME/KEY: misc_feature

226 <222> LOCATION: 1- 400

227 <223> OTHER INFORMATION: n = g, a, c or t(u)

228 <400> SEQUENCE: 10

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229      ttctgggtg cgtctctctc tgagatagt tatccctat aggggggggc tcacttttagc      60
230      acagtttatg aatattatta catatttcac aagactttat attgttataa tatgcctcat      120
231      gtgagatata tgtgattctg tgggtggtgt ctcagagggg gtttggttta ttggggataa      180
232      tagtttgccc ctgcgggggt ctatatttat atatgtgaca caatatatta gagagatttt      240
233      tggttatata tatttccctt cgcgggggtg gagatttata acagggggag agcttttccc      300
234      ttgttagcaa aagtccctgg tctcgtcccc catctcccaa aaaaaaaaaa atgtgaaaaa      360
235      aaaaaaaaaa agggccctc ttgagtgatg tccccctctt      400

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237 <210> SEQ ID NO: 11

238 <211> LENGTH: 880

239 <212> TYPE: DNA

240 <213> ORGANISM: Rattus norvegicus → 2207

241 <221> NAME/KEY: misc_feature

242 <222> LOCATION: 1- 880

243 <223> OTHER INFORMATION: n = g, a, c or t(u)

244 <400> SEQUENCE: 11

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W--> 245      acccaatctt nanggtggca gtgngngnga tcttaacggt ttttnagaaa aaaaantnct      60
W--> 246      tcgctncac ccccaagcct ccnttctta ncagctttt tatangaaaa aagatgataa      120
W--> 247      cgaaatttta aaaaccgtcg ttagaggaaa tgaagggtca gccgaccatt acctganagt      180
W--> 248      aatgaaggtn ttccggaggg ttgccttcca atcccagatg gatttgagtt tcaggatcaa      240
W--> 249      ttcagttacc gntgaccatc caccnncctc cngtataatc attngatgag gatgaatggt      300
W--> 250      gagtgagtga tgatgatgat gatgatgat aagggatgag aagnacacta tgataacaag      360
W--> 251      tgtctcagtc cacattaagg tttgcctgna aattagtga taagccatgg gagacaaatt      420
W--> 252      cttttcnac acaattaata gtntcttant ccttcccatc ttctctgccc cattctgttt      480
253      tccaccacag gtctgcagcg ggctacagct tccagtctcc aagcaaatac cagaactgga      540
254      ggagaaaatt ccagtccagt gagtcatggg cagggggagg ggtggggtaa gggcagtggc      600

```

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

Use of n and/or Xaa has been detected in the Sequence Listing.
 Review the Sequence Listing to insure a corresponding
 explanation is presented in the <220> to <223> fields of
 each sequence using n or Xaa.

VERIFICATION SUMMARY

DATE: 11/07/2001

PATENT APPLICATION: US/09/509,712A

TIME: 13:41:55

Input Set : N:\Crf3\09192001\I509712A.raw

Output Set: N:\CRF3\11072001\I509712A.raw

L:7 M:270 C: Current Application Number differs, Wrong Format
L:24 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1
L:24 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:25 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1
L:25 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:26 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1
L:26 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:27 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1
L:27 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:28 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1
L:28 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:29 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1
L:29 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:30 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1
L:30 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:39 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1
L:39 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:49 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:2
L:49 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:50 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:2
L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:51 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:2
L:51 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:52 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:2
L:52 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:53 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:2
L:53 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:54 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:2
L:54 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:55 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:2
L:55 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:56 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:2
L:56 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:57 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:2
L:57 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:68 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:68 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:69 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:69 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:70 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:70 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:71 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:71 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:72 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:72 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:73 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:73 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:74 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3

VERIFICATION SUMMARY

DATE: 11/07/2001

PATENT APPLICATION: US/09/509,712A

TIME: 13:41:55

Input Set : N:\Crf3\09192001\I509712A.raw

Output Set: N:\CRF3\11072001\I509712A.raw

L:74 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:75 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:75 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:76 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:76 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:77 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:77 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:78 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:78 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:79 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:80 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:80 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:81 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:81 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:82 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:82 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:92 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:92 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:93 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:93 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:94 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:94 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:95 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:95 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:96 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:96 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:97 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:97 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:98 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:98 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:99 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:99 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:100 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:101 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:101 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:102 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:102 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:103 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:104 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:107 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:107 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:108 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4
L:108 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:118 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:5
L:118 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5

VERIFICATION SUMMARY

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Input Set : N:\Crf3\09192001\I509712A.raw

Output Set: N:\CRF3\11072001\I509712A.raw

L:119 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:5
L:119 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:120 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:5
L:120 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5